# MOPITT “Emergency” Data Processing Plan

Eos AM-1 SWAMP Meeting

NASA Goddard Space Flight Center

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# Overview and Perspective

- MOPITT has only 2 at-launch Standard Products and 3 Experimental Products with relatively small computational resource requirements.
- MOPITT instrument activation & checkout takes ~ 3months requiring a high degree of interactivity and low product generation (DAAC) needs.
- SDP algorithm checkout emphasized in period L +3-5 months with low DAAC utilization due to need for high interactivity

# Approach


- Build on SCF SDP software testbed which will be in place to support instrument activation and Algorithm checkout
- Add rudimentary operator interface to aid manual batch processing
- Extend planned local data management capability to support product generation, larger scale ancillary data (DAO) and Level-0 data ingest.
- Add capability to capture and manage appropriate metadata during product generation.
- Add student assistants to support operations in largely manual data acquisition, ingest, product generation and export environment
- Rely on LaRC V-0 DAAC for distribution to user community
- Purchase mission phase SCF components (in original plan) which can be expanded as required (e.g.. SGI Origin 2000 multiprocessor, etc.) to support SCF product generation

# Planned Capability

- At the point L+6 months:
  - > Should be able to process all Level-1 product at acquisition rate
  - > Should be able to process 25-50%of Level-2 product at acquisition rate

    OR
  - > Process TBD% at acquisition rate + TBD% reprocessing

- Priority should be given to product validation and algorithm improvement until at least L+12mo
- Level-2 processing should probably focus on a TBD number of periods in coordination with data validation activities, other instruments and field campaigns
- Experimental Level-3 product (Global Grids) for a few case studies at ~L+5-6 months (Sparse maps possibly earlier)